Convention on Biological Diversity

THE ABS CAPACITY DEVELOPMENT INITIATIVE

L'INITIATIVE DE RENFORCEMENT DES CAPACITES POUR L'APA

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Strategy: Domestic ABS Legislative and Regulatory Measures

Is ABS covered by existing legislative and regulatory measures? If so, is there a need to amend these measures to respect new requirements under the Nagoya Protocol or to develop new measures to implement the Nagoya Protocol?

Who owns genetic resources in your country (e.g. State, Private Land Owners, indigenous and local communities, etc.)?

What are the existing permit systems to collect biological resources? Clarify in which areas and for which purpose.

Report of Group Work 1

Is ABS covered by existing legislative and regulatory measures?

In the **Dominican Republic**, there are currently no laws or regulatory measures designed to specifically address access and benefit sharing. However, there are some provisions, currently being applied, related to access for biodiversity research. There is a draft law on access to genetic resources, and also a draft biodiversity law. Article 40 of the biodiversity law states that if the research is found to have commercial potential, the government should receive a share of the benefits, but the details of the policy governing the benefit sharing have not been fully worked out. Work is being done on the elaboration of models contracts for benefit sharing.

Under the draft law, persons/companies wishing to do research utilising genetic resource signed one contract/agreement for the research, i.e. to access the resources. This contract specifies that if the genetic resources accessed are found to have commercial value, there will be joint ownership between the company and the government, and that the company will have to sign a second contract establishing the arrangements for benefit-sharing. The actual terms of the benefit-sharing are then negotiated and finalised in the second contract after the useful discoveries have been made.

The process of developing model contracts is complicated, for example addressing the fact that contracts need to take into account that the benefits may take a long time to materialise and to take into account benefits that accrues over the long term. After the Dominican Republic signed the Nagoya Protocol, steps were taken to strengthen benefit sharing provisions, and to renegotiate contracts to the government received a larger share of the benefits. One company that had signed a research contract with a benefit sharing at a rate of 0.5% refused to sign a contract for a higher benefit sharing rate, and therefore ceased their research in the Dominican Republic and moved it instead to Cuba, where the benefit sharing provisions related to commercialisation did not apply.

In **Haiti**, the provisions of the Protocol and the legal implications are now being analysed. There is some research and exportation of genetic resources taking place, but there is no law to regulate this, and also there is no authority or sufficient capacity to monitor what it going on, or what agreements may have been established governing this research. Companies/persons coming to do research in Haiti may apply for permits or contracts or notify government agencies or local government of what they are planning to do, but there is no requirement for this, and there is no system to take account of what permits or agreements have been signed. Efforts are being made to work with local government and groups to raise awareness about granting access and benefit-sharing.

In the **British Virgin Islands**, there is currently no existing legislation or regulatory measures to address ABS. However the government is currently in the process of updating a wide range of legislation. An Environmental Management and Conservation of Biodiversity Bill has been drafted that is supposed to be comprehensive and supposed to encompass all applicable Multilateral Environmental Agreements (MEAs). Consultations on this Bill have been held and the Bill is being revised to address some concerns raised during the consultations. Note that as a British Overseas Territory, the coverage of MEAs signed by the UK have to be specifically extended to the British Virgin Islands to be applicable there, on the basis of joint agreement between the government of the UK and the government of the British Virgin Islands. Not all MEAs ratified by the UK automatically apply to the British Virgin Islands.

In **Jamaica**, there is currently no legislative or regulatory measure specifically about ABS. These need to be developed and implemented. Benefit Sharing is based largely on goodwill and individual ethics.

Ownership of genetic resources

In the **Dominican Republic**, all genetic resources are State property, according to the constitution, and therefore shared benefits accrue to the state. However, a matter that the government is currently looking at relates to the sharing of benefits related to utilisation of traditional knowledge about genetic resources, in such a way that the community gets a fair share of the benefits. In this regard, studies are being done about the kinds of traditional knowledge in the country and the communities in which traditional knowledge can be found. The goal is for provisions to be included in the draft legislation about these communities and their traditional knowledge. There is also the aim to address the issues of joint ownership over commercial developments based on genetic resources, especially in cases where the developments are things that were not anticipated in the original research contract. Work is being down with the Intellectual Property office to develop the necessary provisions.

In **Haiti** also, the Constitution specifies that all resources found on land and water are State property, and therefore benefits from their exploitation would accrue to the State. There have been cases where extraction of resources (gold-mining) had to be halted because the legal provisions, especially for benefit-sharing with the State were not sufficiently clear. Therefore, steps are being taken now to revisit that situation, to assess the law; to assess the benefits expected to be accrued and to make necessary provisions for benefit-sharing. But monitoring is key to achieve compliance. Haiti also has geographical indications applied to products for export, but local communities do not receive any share from this.

In the **British Virgin Islands**, terrestrial resources are the property of the person on whose land they are found. Provisions exist for the State to acquire the land in order to acquire the good, but of course the existence of a valuable or potentially valuable resource on the property increases the price for acquisition. Ownership of marine resources resides with the government, even in the case of private islands and privately owned coastal properties.

In **Jamaica**, there is now specific legislation on ownership of biodiversity or genetic resources, so the basis of ownership is ownership of the land on which the resources is found, keeping in mind that the government may exercise an option to acquire property for the national good. The Intellectual Property office is working with World Intellectual Property Organisation (WIPO) on registering products with geographical indications, such as Blue Mountain Coffee. So there is some work being done on developing Intellectual Property provisions for certain resources, but nothing specifically for the Protocol.

Permitting Systems

Permitting for research in the **British Virgin Islands** involves making an application using a standard form, which is submitted to the Ministry of Natural Resources and Labour and reviewed by the Conservation and Fisheries Department. The Department does a technical review of the application and advises/makes a recommendation to the Ministry on whether or not it should be approved; the Ministry makes the final decision and issues the permits. The permits usually involve a requirement for research to share the data and the research they have obtained/produced, but there have been problems getting researchers to comply with this.

In **Jamaica**, NEPA issues research permits, but provisions to hold people in compliance and to share data and results are not as strong as they could be and need to be improved.

In the **Dominican Republic** there are three kinds of systems: permits, contracts, agreements. Permits are for institutions or people doing research assessing ecosystem condition and the status of biodiversity and genetic resources, i.e. not research on the utilisation of genetic research. There are permits fees involved. Contracts are for companies that wish to access genetic resources for the purpose of making discoveries, potential utilisation. These are the contracts that include references to potential future benefit-sharing. Agreements are with educational institutions and special groups doing research. Because the research is for educational purposes and development of Knowledge, fees are waived in the expectation that there will be non-monetary benefits instead. The non-monetary benefits expected - training, technology transfer, etc. are written into the agreement.

Other points discussed

What about ABS *within* countries? What about provisions within a country concerning sharing benefits of research done within the country indigenous and local communities whose resources and Traditional knowledge were used? Do such provisions exist in Caribbean countries?

Benefit-sharing within a country relates to issues of wealth distribution, justice and equity. Need to take care not to marginalise indigenous and local communities.

When it comes to benefit sharing, measures to ensure compliance are very important, and care must be taken to ensure sharing of benefits that materialise even long after the original access. Also need to take into account how to cover changes of intent with regards to the research, i.e. if the utilisation of it goes in directions that were not originally intended /planned for, but that brings benefits that should be shared.

Compliance issues cannot be adequately addressed just in a research contract. Therefore the importance of the ABS clearinghouse and a global monitoring system is key. A regional clearinghouse would help for countries in the region know which companies are seeking to do research on what and what permits have been granted, or declined, and for what reasons. This information sharing would be an important element to eliminate a “race to the bottom” in term. The ABS Clearinghouse provision in the Protocol does not include requirements to share information when permission is not granted, or on every application made.

With respect to ownership, what if having particular Knowledge of genetic resources on a piece of property serves as an advantage to buy the property at a low price from an indigenous/local community and then exploits that resources in a way that reap significant benefits flowing down to these indigenous/local community. Is there recourse for the community in such situations?

Also, if ownership of the genetic resources resides with the property owner, what is the situation if the foreign user owns the land or if it is otherwise foreign owned? If the genetic resource ownership

rights belong to the owner of the land, then on what grounds should benefit-sharing be established, and what role does the government have in negotiating terms for PIC and MAT?

ABS regulations and provisions re ownership of genetic resources may also have implications for bilateral trade agreements and for joint initiatives and partnerships between local entities and foreign investors. What are the implications for the protection of local resources under such agreements?

Strategy: Establishing Institutional Arrangements

What are the institutional arrangements for ABS at the national, regional, local, Government/NGO?

What are the national institutions are responsible for issuing collecting or research permits?

Who has the responsibility of managing biodiversity in forests, marine areas and wetlands?

Can existing institutions/authorities deal with ABS or is there a need to set up a new body?

Should there be one or more than one competent authority?

Report of Group 2

What are the institutional arrangements for ABS at the national, regional, local, Government/NGO?

Guyana: Ministry of Natural Resources and Environment; Guyana Gold and mining Commission; Forestry Commission; Protected Areas Commission; Lands and surveys commission; For indigenous community- Ministry of Amerindian Affairs and the National Toshaos Council ; Germplasm - Ministry of Agriculture and the National Agriculture Research Institute.

Jamaica: None; arrangements coming out of the Ministry of Agriculture and Fisheries; using importation and transfer of crops and food/feed. Permitting system; CITES permits that can be skewed towards ABS; Ministry of Water, Land, Environment and Climate change; Ministry of Foreign Affairs and Trade.

Saint Lucia: Ministry of Sustainable Development - Focal Point for the Convention on Biological Diversity (coordinating), Ministry of Agriculture, Food Production, Fisheries and Rural Development (implementing); Soufriere Marine Management Association; Ministry of External Affairs. The Biodiversity Bill and the Fisheries Act speaks to ABS; however there is a need to incorporate fully to these and other existing legislations.

Suriname: Ministry of Physical Planning, Land and Forest Management (ROGB) namely the Permit section is responsible for this issue

Overall Comment: In most countries, capacity is limited. In order for us to address the requirements of the ABS, there is therefore the need to streamline existing protocols in Agriculture, Fisheries and frontline sectors to incorporate ABS.

(a) What are the national institutions are responsible for issuing collecting or research permits?

Guyana: Environment Protection Agency; University of Guyana/ Amerindian research Unit; Forestry Commission; and NARI.

Jamaica: National Environment and Planning Agency (NEPA) (main) Focal Point for collection and seek advice through referral agencies; Fisheries Division; Forestry Department gives technical advice to NEPA.

Saint Lucia: Forestry Department and Fisheries Department; Ministry of Foreign Affairs.

Suriname: ROGB namely the Conservation Division.

(b) Who has the responsibility of managing biodiversity in forests, marine areas and wetlands?

Guyana
Forests: EPA and Forestry Commission
Marine: Ministry of Agriculture/Fisheries Department
Wetlands: EPA

Jamaica
Forests: Forest Department
Marine: Fisheries Department and the SMMA
Wetlands: Fisheries Department and Forestry Department

Saint Lucia
Forests: Forestry Department
Marine: NEMPA and Foreign Affairs
Wetlands: Fisheries Department, Forestry Department and NEMPA

Suriname
Forests: Forest Service
Marine: Ministry of Fisheries
Wetlands: Forest Service

Can existing institutions/authorities deal with ABS or is there a need to set up a new body?

Guyana: Yes, led by the Ministry of Natural Resources and the Environment.

Jamaica: There is a need to strengthen the legislation of the agencies involved to include all the thematic areas of ABS.

Saint Lucia: New body needed. There is a need to strengthen existing institutions by increasing financial and human resources. NEMPA can function as the focal point.

Suriname: The ROGB has certain rules in place regarding access to genetic resources, namely the issuing of a permit for research in protected areas. For adequate control of export of genetic resources, the collaboration with the Customs Office needs to be strengthened.
Should there be one or more than one competent authority?

Guyana: Yes.

Jamaica: Yes, but there should be one authority to receive requests for research and one to act as the repository and to ensure compliance with terms of the permit. But other agencies with expertise in the research field will review and grant permission. This may increase the ease of doing business and reduce the concern of hampering research. However, there is need to further discussion with a wider cross section of agencies at the national level.

Saint Lucia: No.

Suriname: The issue has not yet been discussed at the national level.

Strategy: Dealing with Traditional Knowledge

Do you have indigenous and local communities in your country?

What rights do indigenous communities have over genetic resources in their territories?

What measures are in place for protection of Traditional knowledge?

Are there any traditional/customary laws and procedures are in place for access to TK and benefit sharing with relevant communities? If so, how are they recognised by the legal framework of the country?

Do the benefits from the utilisation of this Knowledge come back to the communities? How?

Report of Group 3

Do you have indigenous and local communities in your country?

Belize, **Suriname** and **Dominica** have both indigenous and local communities. Dominican Republic and Haiti have local communities only.

What rights do indigenous communities have over genetic resources in their territories?

In **Dominica**, the indigenous have a certificate of title for their territory, they all have rights over their genetic/natural resources, although they are a small population. The chief is in charge of the resources.

In **Belize** and **Suriname**, the rights of indigenous communities are not recognised by the government, including the rights over genetic resources.

What measures are in place for protection of traditional knowledge?

In **Belize**, **Suriname**, **Dominica**, **Haiti** and the **Dominican Republic**, there are no measures in place for the protection of traditional knowledge. For example, in Suriname, there is no specific definition of traditional knowledge.

Are there any traditional/customary laws and procedures are in place for access to traditional knowledge and benefit sharing with relevant communities? If so, how are they recognised by the legal framework of the country?

There is no traditional/customary law in any of these countries, but there is a custom to share traditional knowledge. For example, the use of plants as medicine, the access is free and/but there is no benefit sharing.

Do the benefits from the utilisation of this knowledge come back to the communities? How?

The benefits from the utilisation of traditional knowledge do not come back to the communities. It is STOLEN KNOWLEDGE.

Report of Group 7 focussing on Jamaica

Do you have indigenous and local communities in your country?

Leeward Maroons, situated in the western section of the island
Accompong Maroons (AC) = Cockpit Country
Flagstaff, Maroon Town

Windward Maroons, situated in the eastern section of the island
Scots Hall – St Mary
Charles Town Maroons (CT) = Blue Mountains
Moore Town – John Crow Mountain

Each community has its own Colonel. The Maroon Secretariat is composed of four Colonels.

What rights do indigenous communities have over genetic resources in their territories?

AC: No documents to show. Land is Maroon land and anything on or below the lands. Maroon – sovereign rights. Borders or sovereign rights – parish of St. Elizabeth, Trelawny, Westmoreland and St. James.
CT: Maroon Council has jurisdiction. Legal documents – land deeds.

What measures are in place for protection of traditional knowledge?

AC: Maroon forest rangers, can remove offenders, seize materials and report to local council and police. Local Council gives permits.
CT: Have to go to Council to do any research. Trespassers stop them and take them to the police.

Are there any traditional/customary laws and procedures are in place for access to traditional knowledge and benefit sharing with relevant communities? If so, how are they recognised by the legal framework of the country?

AC: If someone wants to access traditional knowledge, they should approach the local council and then be given access to the relevant person. A permit is required. Have herbal booklets – traditional knowledge – accessed by Herbal Council (local council). Recognised by legal framework when it suits them. Dispute – from outside, turned over to police, larceny. If Maroon, dealt with internally, simple larceny, small fine or community work and expelled from community.
CT: worked with JIPO and formulated release forms. People would need to sign. Been used for last 4 years. In last 2 years, been enforced.

Do the benefits from the utilisation of this knowledge come back to the communities? How?

AC: Some do some don't. Use of knowledge comes back through individual Maroon endeavour.
CT: Benefits seen, publicity. Get a little benefit from release forms. For example, film for tourist board. Similar for Moore Town. Scots Hall just getting active.

Group Exercise Questionnaire on Strategy: Dealing with Transboundary Issues

What genetic resources cut across national jurisdictions of the region?

Is traditional knowledge associated with the genetic resources found in neighbouring countries?

What are the common issues and challenges?

Can these benefits be addressed through a regional approach?

Report of Group 4

What genetic resources cut across national jurisdictions of the region?

Marine Turtles
Coral Reef Spurs
Conch
Migratory Fish
Marine Microorganisms.
Sea weeds, etc.
Possibly invasive species as well.

Is traditional knowledge associated with the genetic resources found in neighbouring countries?

Yes, shark for example – for Cancer
Red and Blue scorpion – used for Cancer (Cuba and Dominican Republic)
Cuba uses turtle shells to make plates, jewellery and glass frames (Crafts)
Honey bee used for cataracts in eyes
Cuba Morinda Rogo, plant used like Viagra
Boisbande for Grenada and Dominica – aphrodisiac

What are the common issues and challenges?

Documentation and laws
Knowledge of the proper medicinal value of these things – Research and development
To include it in the updated National Biodiversity Strategy and Action Plan (NBSAP)
Financial Resources
Technical capacity building
Diversifying cultures and using ecosystem management system approach
Incentive for conservation
Access to information
Common issues –
Distribution of species, population of species etc.
Access to genetic resources
Mainstreaming
GMOs

Can these benefits be addressed through a regional approach?

Yes, but whether or not this will be practical or feasible is an issue however. Bilateral approaches may be more appropriate.

Group Exercise Questionnaire on Strategy: Valorisation Strategy

Is there a demand for access to genetic resources in your country? What type of resources (e.g. forest, marine)? For what purpose (e.g. non-commercial research, bioprospecting, development of commercial products).

Are there any R&D activities being carried out in your country?

By whom? The private sector, the public sector, academic, institutions?

Do you have any examples?

Report of Group 5

Jamaica

Is there a demand for access to genetic resources in your country?

Yes.
Specific area – Maroon Sites or Cockpit Country, University of West Indies
What type of resources? – Flora and Fauna, Forest and Marine, (Fungi, micro-organisms), spores
Specific Maroon Site – Cockpit country research into carbon emissions from forest
For what Purpose?

Non-commercial research: e.g. for use in primary health care (self-administrated), biomass, fuel,
Bioprospecting: e.g. for medicine, biomass,
Development of commercial products?

Are there any R&D activities being carried out in your country?

By whom? The private sector, the public sector, academic, institutions?
Do you have any examples?

Yes, R&D activities are being carried out in Jamaica by the Private sector, the public sector, academic, institutions. For example:

R&D (Non-commercial), University of West Indies – Mona Campus (Natural PRODUCTS INSTITUTE, Chemistry Department, Basic Medical Sciences. Biotechnology Centre) and CARDI.
R&D - Commercial: Heritage tourism –recreation and tourism, Jamaica Scientific research council: transfer of technology for commercialisation on a large scale
Dedicated to commercial: Biotech R&D which is dedicated to nutraceuticals and many other small businesses (soaps, candles, etc.).

Saint Lucia

Is there a demand for access to genetic resources in your Country?

Yes, there is a demand for access to genetic resources in Saint Lucia.
Specific area – Within Crown Land (Forest Reserve all life zones).
What type of resources? – Flora, Fauna, Microorganisms and mycoplasma. (Forest, Marine, and terrestrial} - Prime location in **Government Forest Reserve** – Inventory of Flora and Fauna
For what Purpose?

Non-commercial research: e.g. self-administrated for use in primary health care; also for fuel, water, shelter
Bioprospecting: e.g. for medicine, biomass, fuel
Development of commercial products: e.g. medicinal, floral trade, food, dyes, biomass, soap, perfumes, essences.

Are there R&D activities being carried out in your country?

By whom? The private sector, the public sector, academic, institutions?
Do you have any examples?

Yes, some R&D activities are being carried out in Saint Lucia by The Private sector, the public sector, academic, institutions i.e. by the Ministry of Agriculture, Forestry, CARDI, FRC, TRAMIL, Eden Herbs, CAPSICUM, Taiwanese government, Ministry of Health, CARPHA (CEHI), St Lucia National Trust, CANARI (Charcoal & Sea moss) OPSR (wines, dyes etc.). For example:

R&D for Commercial Purpose: Frank incense, Medicinal plant, food, brooms, perfumes, oils, castor oil, soaps, sea moss, herbal drinks, teas, creams, capsules, mauby, nutraceuticals, arts & crafts.
Broom plant – agronomy (***Coccothrinax barbadensis*) Latanyé Palm**
Incense Plant - ***Protium attenuate, Lansan(MSc thesis)***
R&D (Non-commercial), Heritage tourism –recreation and tourism, Endemic Parrots and birds, snakes…)

Report of Group 8

Refer to the table below which looks at valorisation related issues focussing on Suriname and Jamaica.

Country	Resources								
Jamaica	**Plants**	**Animals**	**Aquacul-ture**	**Marine**	**Forest Re-serves**	**Wetlands**	**Micro-organisms (Mush-rooms in particular)**	**R&D**	**By Whom**
Purpose	Non-commercial Research	Non-commercial Research	Non-commercial Research	Non-commercial Research	Non-commercial Research	Non-commercial Research	Non-commercial Research	Yes	Academia and public sectors
	Bio-prospecting	Bio-prospecting	Bio-prospecting	Bio-prospecting	Bio-prospecting	Bio-prospecting	Bio-prospecting	Yes	Academia, private and public sectors
	Development of commer-cial products	Development of commercial products	Development of commer-cial products	Development of commer-cial products	Development of commer-cial products	Development of commer-cial products	Development of commer-cial products	Yes	Academia, private and public sectors
Examples of Non-Commercial Research	Yam research	Diabetic re-search with rats	Fish diversity research (fresh water)	Diversity of plants and medicinal plant re-search	Diversity research on endemic plant & animals	Research of crustacean and amphibi-an	Research on pathogens affecting plants and animal	-	-
Suriname	**Forest**	**Plants**	**Animals**	**Aquaculture**	**Marine**	**Wetlands**	**Micro-organisms**	**R&D Activi-ties**	**By Whom**
Purpose	Bio-prospecting	Bio-prospecting	Bio-prospecting	n/a				Yes	Private sectors
	Non-commercial Research	Non-commercial Research	Non-commercial Research			Non-commercial Research	Non-commercial Research	Yes	Academia (CELOS)
	Development of commer-cial products			Develop-ment of commercial product	Develop-ment of commercial product			Yes	Private sectors
Examples of Development of Commer-cial Product	***Production of carapa oil (krappa olie) in Apura/*** ***Production of pomtayer in Apura/*** ***Production of herbal medi-cines (Odany Jewa of Tropilab)***	In the agricul-tural sector: harvesting of agricultural crops and processing of agricultural products for commercial use (e.g. ketchup, amsoi op azijn, zuurkool)		Shrimp production for export	Fish produc-tion and processed for export Shrimp production for export				
Examples of Non-Commercial Research	***Forest Diver-sity and inventory***	Plants diversity and inventory/ A cassava gene bank devel-oped by CELOS to conserve, characterise & promote its use in the processing sector. The gene bank displays a live collection of cassava varie-ties that are locally and Traditionally used. Rice Gene Bank	Research for new species and behav-iour			Diversity and water quality			

Group Exercise Questionnaire on Strategy: Stakeholder Involvement

Who are relevant stakeholders in your country (e.g. Indigenous and Local Communities, research institutions, universities, private landowners, business community)?

What is their role in the conservation and sustainable use of biological resources?

Who are the key actors in research, processing or export of biological resources?

Report of Group 6

Who are relevant stakeholders in your country (e.g. Indigenous and Local Communities, research institutions, universities, private landowners, business community)?

Maroon (Jamaica & Suriname)
Indigenous Groups (Suriname)
University of Technology (Jamaica)
Forestry Department
Fisheries Department
Ministry of Agriculture
Attorney General / Legal Fraternity
Private Sector
Ministry of Social Transformation
Small Enterprise Development
University of the West Indies
Institute of Research & Development
Arts & Crafts
Private Landowners
External Universities (British Virgin Islands & Antigua)
Ministry of Natural Resources
Ministry of Tourism
Ministry of Labour
Scientific Research Council
Intellectual Property Office
Medical Community
Ministry of International Trade
Organisation of Indigenous People (Suriname)
Ministry of Environment
Barbados Agriculture Co. (Statutory Body)
Barbados Agriculture Dev.& Marketing Coop (Stat.)
Ex. Cottons of Caribbean Inc. (Barbados) (Private)
National Farmers Assoc. (Barbados) (Stat.)
Ministry of Foreign Affairs
Environmental Awareness Group (Antigua)
Protected Areas Authority
Jost Van Dyke Preservation Society (British Virgin Islands)

What is their role in the conservation and sustainable use of biological resources?

Government	Regulatory Authority Providing enabling environment Providing resources (technical & financial)
Private	Produce enterprise and support Create business market Provide resources
NGOs	Research Public awareness / Communication and networking Provide resources Capacity building
Indigenous and Local Community Groups	Producers of the traditional knowledge associated with genetic resources

	Sustainable agriculture Reforestation Biological conservation (*in situ & ex situ*)
Educational Institutions	Research

Who are the key actors in research, processing or export of biological resources?

Research	Universities Research centres
Processing / Export	Small Enterprise Development Arts and crafts Pharmaceutical Companies Cosmetic Industry Food Processors

Traditional Knowledge & Indigenous Peoples & Local Communities

Group Exercise Questionnaire n°1 on Traditional Knowledge and Indigenous People & Local Communities

- What steps should be taken at country level to establish procedures related to access to TK and to ensure benefit-sharing? (e.g. community protocols, model contracts, minimum ABS requirements).

- What steps should be taken at country level to establish procedures related to access to GR (when communities have established rights over them) and to ensure benefit-sharing?

Report of Group 1 on Traditional Knowledge and Indigenous People & Local Communities

- **1 & 2 Steps to establish procedures related to access to TK/GR and ensure benefit sharing?**

    - Maps/inventories/profiles of traditional knowledge, of GR and of indigenous and local communities. Keep in mind that these inventories will require continual updating.
    - Cultural policies to officially recognise traditional knowledge. Establishing a clear legal definition of traditional knowledge.
    - Awareness raising and public education in the indigenous and local communities about ABS and about the type and magnitude of potential benefits, monetary and non-monetary, that they could receive and are entitled to.
    - Emphasising the value of the potential non-monetary benefits, e.g. the capacity-building, transfer of technology that communities could benefit from via benefit-sharing. Giving concrete examples of what these potential benefits can entail, not just abstract descriptions.
    - Mainstreaming and integrating ABS issues into community level development programmes.
    - Including traditional knowledge in community profiles as features/assets held by the community and raising awareness about the values of TK.
    - Building capacity of the community to negotiate agreeable terms and suitable contracts that address long-term benefits, benefits arising from uses other than the original intended use, benefits that materialise long after original access.
    - Building capacity of the community to track and monitor the uses that are made of their GR and TK, so as to ensure that they get a fair share of benefits.
    - Negotiations and discussions/consultations with indigenous and local communities about the types of access provisions they would like to see included in national ABS provisions.
    - Preparing legislation about recognition of and access to TK and benefit sharing, including consultations with indigenous and local communities, and with the wider national community. Legislation should have the scope to take into account the development and evolution of traditional knowledge, i.e. should lend itself to amendment and revision to reflect the changing national context e.g. via schedules or regulations.
    - National [and regional] databases of access applications, including records of those that specifically make reference to TK.
    - Developing a regional community of good practice with respect to access to TK and benefit-sharing.
    - Setting up structures and building capacity for communities themselves to document applications for access.

- Establishing mechanisms for ILCs to report inappropriate access to their TK, making sure that these mechanisms are easily accessible to the communities, building the capacity of the community to monitor, self-regulate and to report infractions concerning access to both TK and GR (e.g. having local community forest rangers to report people who are taking specimens without permission).
- Capacity building for NGOs and community groups to act as watchdogs/advocates for ILCs and to protect their rights.
- Provision should be developed for ABS within the country as well as ABS between countries, i.e. sharing benefits of research done within the country with relevant ILCs.

Report of Group 2 on Traditional Knowledge and Indigenous People & Local Communities

- **What steps should be taken at country level to establish procedures related to access to TK and to ensure benefit-sharing? (e.g. community protocols, model contracts, minimum ABS requirements).**

Guyana: identification of lead Agency for ABS. Mapping of sources of traditional knowledge and educate them on ABS. Involvement of stakeholders in the procedure development process.

Jamaica: National acceptance of ABS thru intensive PA campaign. Designation of a national competent authority/agency and development of the necessary legislative framework (supported at all levels).

Saint Lucia: No indigenous groups but local communities. More public awareness about researchers and benefits from research at community, government/Policy level. Also a regulatory framework that includes monitoring and observation of researchers. Background checks on researchers. Standardisation of criteria and procedure across regulating bodies. Endorsement at the level of AGs. Min. of Commerce should be engaged early to ensure that we meet national guidelines for ease of doing business.

Suriname: National level legal official recognition of TK, through Rio Conventions and introduction of Prior informed consent. (UNCBD ABS (natural ecosystems) and International treaty on Plant Genetic Resources for food and Agriculture Protocol deals with the maintenance of food security and independence) both deal with TK. TK is oral Knowledge which should be documented within tribes itself. ABS gives opportunity to register the Knowledge.

- **What steps should be taken at country level to establish procedures related to access to GR (when communities have established rights over them) and to ensure benefit-sharing?**

Guyana: No answer.

Jamaica: Need to conduct more detailed inventory of resources where needed. In addition to what mentioned in the answer to the previous question.

Saint Lucia: No answer.

Suriname: No answer.

Report of Group 3 on Traditional Knowledge and Indigenous People & Local Communities

- **1 & 2 Steps to establish procedures related to access to TK/GR and ensure benefit sharing?**

- To approach the Government, telling them that the CBD they have signed in de article 8j and 15 of the CBD refers to the need of protection of TK and Benefit sharing.
- A data base should be made, because we need to know what to protect.
- In areas where there transboundary TK like Mayans of meso-America, the overlaps in TK should be determined and highlighted in the database
- What entity in or outside the government will be responsible for the lobbying. And sensitising the public and Government regarding the Nagoya Protocol its scope and benefit.
- Define who is going to finance the previous point.
- Develop the protocols for negotiations before signing agreement or contract.
- Write general guidelines to develop specific agreement and or contract in the case by case basis
-

Report of Group 6 on Traditional Knowledge and Indigenous People & Local Communities

- **What steps should be taken at country level to establish procedures related to access to TK and to ensure benefit-sharing? (e.g. community protocols, model contracts, minimum ABS requirements).**

  - Legislation
    - Specific to ILCs (defining ILCs and recognising the ownership of the TK)
    - Community Protocol
    - Governing ABS relating to TK
  - Focal Point & National Competent Authority
  - Inventory of the TK
  - Building capacity in ILC (educational outreach programs to the community about issues at stake)
  - Contract to govern accessing TK (PIC)[accountability & involve communities]
  - TOR controlling the agreement btw parties (MAT)
  - Issuing of Permit (submitted to ABS Clearinghouse)
  - Certificate issued by SCBD
  - Checkpoints
  -

- **What steps should be taken at country level to establish procedures related to access to GR (when communities have established rights over them) and to ensure benefit-sharing?**

  - Legislation
    - Specific to GR (defining GR and recognising the ownership of the GR)
    - Community Protocol
    - Governing ABS relating to GR
  - Focal Point & National Competent Authority
  - Inventory of GR
  - Building capacity in Government (Environment, Agriculture, Fisheries, etc.)
  - Building capacity in ILC (educational outreach programs to the community about issues at stake)
  - Contract to govern accessing GR (PIC)[accountability & involve communities]
  - TOR controlling the agreement btw parties (MAT)
  - Issuing of Permit (submitted to ABS Clearinghouse)
  - Certificate issued by the SCBD
  - Checkpoints

Group Exercise Questionnaire n°2 on Traditional Knowledge and Indigenous People & Local Communities

- How can countries take advantage of their respective experiences with respect to ABS as it related to traditional knowledge and genetic resources?

- In what ways can the traditional use of biological resources in your country provide useful leads to the development of commercial products?

Report of Group 4 on Traditional Knowledge and Indigenous People & Local Communities

- **How can countries take advantage of their respective experiences with respect to ABS as it related to traditional and genetic resources?**

  - Accessing funding for documentation, research and development (through scientific case studies), promote genetic resources tourism in a sustainable way
  - Implementing legislation to govern access and use in a sustainable way
  - Engage in mainstreaming actives and comparative case studies
  - Engaging in Knowledge and technology, best practices transfer from country to country, within country
  - Identifying indicators
  - Preserving the cultures of indigenous groups (including their spiritual and traditional cultural activities)
  - Promoting food security in terms of dietary specificities of traditional cultures in a sustainable manner
  - Ensuring the avoidance of the introduction of GMOs (plants and foods: example of Mexico and Windward islands (bananas))
  - Giving monetary and non-monetary incentives for the preservation of TK and GR
  - Promote awareness

- **In what ways can the traditional use of biological resources in your country provide useful leads to the development of commercial products?**

  - Commercialisation for medicinal purposes in cottage industry type activities (not pharmaceutical company level)
  - Create patents for those who have the Knowledge (give the people rights over their intellect)
  - Creating and accessing Data bases on these resources in an effort to commercialise the resources. (There can be useful information on the plants and animals in Cuba since the 19th C).

Report of Group 5 on Traditional Knowledge and Indigenous People & Local Communities

Countries in focus: Saint Lucia and Jamaica

- **How can countries take advantage of their respective experiences with respect to ABS as it related to traditional knowledge and genetic resources?**

Traditional knowledge and genetic resources used for:

  - Medicinal purpose (e.g.: cerasee for diabetes, stomach cleansing, gripe for kids)
  - Food (wild yam, ackee)
  - Hygiene (chew stick for dental cleaning, soap bush)

- Cosmetics (Anatto, aloe vera, log wood)
- Shelter (palm)
- Fuel (Forest trees)
- Insecticide (Neem, Fevergrass, bitterwood)
- Entertainment and beautification (Calabash, bamboo)
- Religion (Ganja)
- For health and wealth (mint, seaweed)

- **In what ways can the traditional use of biological resources in your country provide useful leads to the development of commercial products?**

All categories listed above have examples of commercial use. However, there are many genetic resources that have not been fully developed for commercial use.
Small medium and large entities have used these in commercial use: Lever Bros, for example (large scale); Eden Herbs, Biotech R&D (Medium) and local enterprises; and cottage industries (road side, for small scale).

Report of Group 7 on Traditional Knowledge and Indigenous People & Local Communities

- **How can countries take advantage of their respective experiences with respect to ABS as it related to traditional and genetic resources?**

  - Local populations are often very welcoming and readily share with foreigners They need sensitisation on being more selective in the information they share.
  - Need to implement national policies and ABS policies.
  - Sensitise the relevant stakeholders on how these policies can be adopted and how these policies will benefit them
  - Create partnerships and collaborations between Caribbean countries especially where they have common GR or TK
  - For GR, we need to learn from past mistakes where we have freely given GR without due protection of IP or ownership.
  - We need better regulation, more supervision and monitoring of what is extracted and how it is used. Better linkage and reporting and information sharing between government agencies and bodies. Eg. If a vessel is collecting GR in our waters and is caught they should not be let off because they are caught by the coast guard who is just looking for drugs or illegal fishing.
  - Better legal framework for ownership of resources. Better framework for the authorised removal of the resources from the host country
  - If we permit removal then we include conditions within the permits as to how any resource removed can or cannot be used then follow-up is required and long term monitoring to ensure that restrictions are being adhered .
  - Not politicise the resource, that is, it should not become a “one party policy” but instead it should be a national non-partisan issue.

- **In what ways can the traditional use of biological resources in your country provide useful leads to the development of commercial products?**

  - Use indigenous capacities by building encouraging particular professions in school.
  - Producing value added products not just export raw materials therefore keeping the bulk of income generated in the owner country/region.
  - Need contractual agreements between the owners and anyone who wants to commercialise TK or GK.

▪

Report of Group 8 on Traditional Knowledge and Indigenous People & Local Communities

- **How can countries take advantage of their respective experiences with respect to ABS as it related to traditional knowledge and genetic resources?**

Traditional knowledge:

- Sharing of research findings - (to be done through open discussion with all parties outline advantages/disadvantages) this should lead to formal agreement among parties involved
- Sharing of technical transfer – same as above
- Monetary benefits - in relation to economies of scale with – determine by relevant experts
- Royalties – Establish proper recording of the use resources
- Sharing of Intellectual Property Rights – same as point one above
- Acknowledgement of contributors
- Sharing of patent rights – through established agreement.

Genetic Resources

- Royalties – same as above
- Shared Intellectual Property Rights
- Agreement for the replenishment of harvested genetic resources
- Development of DNA technology (genetic fingerprinting data) for resources harvested
- Establish standard procedures and guidelines in the access and use of resources

- **In what ways can the traditional use of biological resources in your country provide useful leads to the development of commercial products?**

  - The establishment of proper IP structure, Government ratification, Community involvement.
  - Quick gathering of Knowledge
  - Capacity Building, infrastructure development and technical transfer (at all levels)
  - Reduced expense and time in product development

Using Existing Permit & Monitoring Systems to Support Implementation of the Nagoya Protocol

Group Exercise Questionnaire n°1 on Permits and Monitoring Systems to Support Implementation of the Nagoya Protocol on ABS

- What are the existing permitting systems in your country?
- What are the different authorities that oversee/regulate the different type of (accessed) resources?

Report of Group 1 on Permits and Monitoring Systems to Support Implementation of the Nagoya Protocol on ABS

- **What are the existing permitting systems in your country?**

Permitting for research in the **BVI** involves making an application using a standard form, which is submitted to the Ministry of Natural Resources and Labour and reviewed by the Conservation and Fisheries Department. The Department does a technical review of the application and advises/makes a recommendation to the Ministry on whether or not it should be approved; the Ministry makes the final decision and issues the permits. The permits usually involve a requirement for research to share the data and the research they have obtained/produced, but there have been problems getting researchers to comply with this. CITES permits are applied for and granted directly through the Conservation and Fisheries Department.

In **Jamaica**, the National Environment and Planning Agency (NEPA) issues research permits, but provisions to hold people in compliance and to share data and results are not as strong as they could be and need to be improved.

In the **Dominican Republic**, there are three kinds of systems: permits, contracts, agreements. Permits are for institutions or people doing research assessing ecosystem condition and the status of biodiversity and genetic resources, i.e. not research on the utilisation or GR. There are permits fees involved. Contracts are for companies that wish to access genetic resources for the purpose of making discoveries, potential use. These are the contracts that include references to potential future benefit-sharing. Agreements are with educational institutions and special groups doing research. Because the research is for educational purposes and development of Knowledge, fees are waived in the expectation that there will be non-monetary benefits instead. The non-monetary benefits expected - training, technology transfer, etc. are written into the agreement.

- **What are the different authorities that oversee/regulate the different type of (accessed) resources?**

In the DR, the Ministry of Environment and Natural Resources oversees the accessed resources. There are departments under the Ministry for coastal and marine resources and protected areas and biodiversity.

In the BVI, the Ministry of Natural Resources and Labour is responsible. The main line agencies under the Ministry are the Conservation and Fisheries Department and the National Parks Trust for research that takes place in national parks, both marine and terrestrial.

In Haiti, Ministry of Agriculture and Natural Resources and the Ministry of Environment are the main agencies responsible for overseeing the resources. The Ministry of the Interior would have responsibility for checkpoints and monitoring.

Report of Group 2 on Permits and Monitoring Systems to Support Implementation of the Nagoya Protocol on ABS

- **What are the existing permitting systems in your country?**

Guyana: Environmental Protection Agency (EPA) has the overall control on research.

Jamaica: Export: Wildlife research permit, CITES permits on Cites species, Protected species grant certificate of exemption and on Endemics specimens for Material transfer Agreement (for Specimens) and for live specimen in a breeding Loan Agreement. Submission of Interim report and Final report

Saint Lucia: There are two main Departments housed in two different Ministries that grant permission to conduct research. However, the Min of Foreign affairs and Tourism have in the past granted permission for research sometimes in consultation with other agencies stated and at times without. Each agency may have its own internal procedure. In the case of Fisheries-related research under the Fisheries Act Cap 7.15 of the revised laws of Saint Lucia 2008, the researcher contacts the Fisheries Department within the Ministry of Agriculture, Fisheries and Rural Development and is required to provide the research proposal. The Department reviews the proposal and may require additional information, adjustments or omissions in discussion with researcher. External stakeholders are also contacted. If permission is granted, a research contract is developed and the terms of the research are articulated. This includes requirements for providing an oral presentation of preliminary research and a copy of any publications of final research; allowing a national representative to accompany researcher and to acknowledge the person if applicable in publication. The research contract procedures operate within the environment of other legislations /international obligations such as CITES. General information on the researcher and their research is placed in an excel database. Monitoring of final outputs is sometimes conducted.

Suriname: Applicants submit research request (word format) manual or digital (not in database) in protected area (forest service). In local communities PIC is required and Minister of regional development should be informed. Forest Service is the agency.

- **What are the different authorities that oversee/regulate the different type of (accessed) resources?**

Guyana: The board of the EPA (multi-stakeholders involvement) and all stakeholders are informed. At the implementation level each village goes through the PIC process.

Jamaica: Import: CITES import permit of Jamaica and export permit of the country of origin. Environmental permit is necessary for the first time (Alien species) GRs and GMO.

Saint Lucia: No answer.

Suriname: CITES is also applied to CITES species and derivatives. Game Law provides the provision for research on Fauna. Flora is not yet regulated in Suriname apart for the Forest Law and Nature Protection Law and Multiple Use Management Areas (MUMAs).

- **What are the existing permitting systems in your country?**

Dominica

- CITES for import/export
- Forestry for terrestrial plants/animals research
- Fisheries Division for marine plants and animals

Dominica Republic

- Agreement with scientists for academic research on genetic resources.
- Contracts with companies for bioprospecting.
- Contracts with companies for development of products based on genetic resources.
- For other purpose we have – CITES and other types of permits for research and use biological resources.

Haiti

- Permits are issued by the Ministry of Environment and Ministry of Public work, Ministry of Agriculture and Natural Resources, but the final word may come from the politicians.

Belize

- Ministry of Natural resources as well as agriculture permit following partially international conventions, disregarding the opinion of the indigenous people.

Suriname

- Research permits in other areas are issued by Suriname Forest Service based on precedence working and it is not based on the legislation term.
- For game animal permits regardless of whether they are in protected areas or not, permits are issued based on the Game Law.

- **What are the different authorities that oversee/regulate the different type of (accessed) resources?**

Dominica

- CITES: Management Authority Environmental Coordinating Unit
- Scientific Committee – Forestry Division
- Fisheries Division
- Forestry Division issues permits for research on terrestrial species
- Fisheries Division issues permits for research on marine species based on the Fisheries Development Act.

Dominica Republic

- The ministry of Environment and Natural Resources issues the agreements and contracts.

Haiti

- Ministry of Environment, Ministry of Public Work, Ministry of Agriculture and Natural Resources.

Belize

- Belize Animal health and Agriculture Authority issue permits (import and export of animals)
- The Ministry of Environment
- Forestry Department

Suriname

- Suriname Forest Service
- Plant Genetic Resources Commission
- Ministry of Agriculture, Husbandry and Fisheries
- Foundation of Forest Control and Forestry Management
-

Report of Group 4 on Permits and Monitoring Systems to Support Implementation of the Nagoya Protocol on ABS

- **What are the existing permitting systems in your country?**
  - CITES (Grenada, Antigua and Barbuda, Cuba, Dominica)
  - Unofficial ABS permitting system for Antigua and Barbuda, Proposed law for Dominica
  - Official permitting system for ABS in Cuba, Protected Areas and non-protected areas as well.
- **What are the different authorities that oversee/regulate the different type of (accessed) resources?**
  - Dominica – CITES authority, Fisheries and Forestry
  - Grenada – Ministry of Agriculture, Lands, Forestry, Fisheries and Environment, Physical planning as well, Tourism
  - Cuba – CICA (Centre for Information and Control of the Environment), Ministry for Science, Technology and Environment, Ministry for Food (Division for fishing) and Agriculture

Group Exercise Questionnaire n°2 on Permits and Monitoring Systems to Support Implementation of the Nagoya Protocol on ABS

- Are there any users within your jurisdiction (public researcher or private companies) that access GR from other countries? If so, which organisations, what types of resources and for what purpose?
- What type of measures could you consider to ensure that users within your jurisdiction respect the ABS requirements of provider countries? For example, where could check points be established?

Report of Group 5 on Permits and Monitoring Systems to Support Implementation of the Nagoya Protocol on ABS

- **Are there any users within your jurisdiction (public researcher or private companies) that access genetic resources from other countries? If so, which organisations, what types of resources and for what purpose?**

St. Lucia

Government (Min. of Agriculture/fisheries and land) and research Institutes import material (selected vegetables, fruits, horticultural items) for research and commercial purposes from regional and international sources.

Jamaica

Regional and national research Institutes have in the past and intend to in the future engage in collaborative research on endemic plant material to investigate for novel chemicals, biologically active material.

- **What type of measures could you consider to ensure that users within your jurisdiction respect the ABS requirements of provider countries? For example, where could check points be established?**

St. Lucia

At present, we are not aware of ABS protocols in place. It will have to be worked out.

Jamaica

- Permit required for either foreign material or genetically modified material in place at NEPA. It is proposed that ABS certificate also include that the user and importer demonstrate that an independent prior informed consent and mutually agreed terms and conditions are in place that protects the interests of both parties.
- JIPO (Jamaica Intellectual Property Organisation) can act as a safe way to ensure that both user and provider are protected in the event that a patent application is submitted.
- Customs can be a good check point.
- Funding agencies (EFJ, Environmental Foundation of Jamaica, FCF, Forest Conservation Fund) can act as good checkpoints.

Report of Group 6 on Permits and Monitoring Systems to Support Implementation of the Nagoya Protocol on ABS

- **Are there any users within your jurisdiction (public researcher or private companies) that access GR from other countries? If so, which organisations, what types of resources and for what purpose?**

Organisation	Resources	Purpose
Ministry of Agriculture	Food crops e.g. cassava, sweet potato, yams, livestock, poultry, etc.	Food provision
Private Company (e.g. British Virgin islands)	Lemur and Tortoise	Ensure survival of the genetic resources
Hotels & landscapers (e.g. Antigua & British Virgin Islands)	Palms, Coconut Trees	Ornamental purposes
CARDI (e.g. Barbados)	Food crops e.g. cassava, banana, etc.	Food provision
Private Florists (e.g. Antigua & British Virgin Islands)	Ornamental Plants e.g. roses, tulips, etc.	Ornamental purposes
Farm & Garden Supplies	Food Supplies (e.g. seeds, plants, etc.)	Commercial
Pet Stores	Pets (e.g. domesticated animals, sea turtles, tortoise, etc.)	Pet Trade
Private Individuals (e.g. Suriname)	Food crops (e.g. corn)	Observation
Private company (e.g. British Virgin Islands)	Dolphins & Parrots	Commercial

- **What type of measures could you consider to ensure that users within your jurisdiction respect the ABS requirements of provider countries? For example, where could check points be established?**

    - Review and update legislation
    - Implement the use of geographic indicators in legislation
    - PIC (community and government level)
    - MAT
    - Capacity building with respect to PIC & MAT
    - Checkpoints
        - Patent offices
        - Universities/research institutions
        - Publication organisations
        -

Report of Group 7 on Permits and Monitoring Systems to Support Implementation of the Nagoya Protocol on ABS

- Are there any users within your jurisdiction (public researcher or private companies) that access GR from other countries? If so, which organisations, what types of resources and for what purpose?

- What type of measures could you consider to ensure that users within your jurisdiction respect the ABS requirements of provider countries? For example, where could check points be established?
-

Report of Group 8 on Permits and Monitoring Systems to Support Implementation of the Nagoya Protocol on ABS

- **Are there any users within your jurisdiction (public researcher or private companies) that access GR from other countries? If so, which organisations, what types of resources and for what purpose?**

Suriname: N/A

Jamaica: Yes – Academia, public and private companies – tertiary, government agencies and private organisations such as horticulture society; mainly plants and animals for research purpose and commercial use.

- **What type of measures could you consider to ensure that users within your jurisdiction respect the ABS requirements of provider countries? For example, where could check points be established?**

Suriname: checkpoint at the Suriname Forest Service, environmental department and the port of entry (harbour and airport).

Jamaica:

- Ensure relevant documentation for importation are met before granting of permit – Ministry of Agriculture and Fisheries – plant quarantine section and NEPA where necessary.
- Point of entry subject to inspection.
- Parties involved should have the ABS policies/guidelines/agreements in place for making the process easier.

Valorisation of Genetic Resources and Associated Traditional Knowledge

– OPPORTUNITIES FOR CARIBBEAN ECONOMIES

Group Exercise Questionnaire n°1 on Valorisation of Genetic Resources and Associated Traditional Knowledge – Opportunities for Caribbean Economies

- Are you aware of any activities that contribute to income creation based on genetic resources, flora, fauna or traditional knowledge? If so, provide examples.

- Is there a national strategy or do you know of initiatives to support the development of, or further develop research capacities in relation to genetic resources and associated traditional knowledge? Give examples.
-

Report of Group 1 on Valorisation of Genetic Resources and Associated Traditional Knowledge – Opportunities for Caribbean Economies

- **Activities contributing to income creation based on GR or TK?**

Participants from BVI, Haiti, the DR were not aware of many such specific income-generating activities based on utilisation of genetic resources.

Some small-scale activities are developing in the **Dominican Republic**, e.g. medicinal products from moringa, but these are not directly supported or incentivised by the government. The Ministry in the DR has a regulation and investigation department with relation to biodiversity and GR, but the investigations department is not very active in terms of work to develop the economic potential of GR and TK.

There are cottage industries in **Haiti** developing herbal medicines and cosmetics on a small scale, e.g. using aloe vera in creams etc., or herbal soaps. Initiatives are beginning to include traditional medicines in the primary health care systems, beginning with an inventory of traditional healers and medicines/recipes that they use.

In the **BVI**, there are some traditional healers preparing traditional medicines, but nothing on a significant commercial scale.

- **National strategy or other initiatives to support development in relation to GR and TK?**

In the **Dominican Republic**, there is a National Conservation and Sustainable Use of Biodiversity Strategy. However it is more of a report of the state of affairs, than a document that proposes particular projects or activities as a way to improve that status. So for example it describes the existence of a national seed bank to promote the commercialisation with added value and sustainability of highly threatened species and to integrate more sectors in this initiative, but it doesn't actually include a proposal for concrete steps to achieve these goals. There is a Plan of Action in the Strategy that sets a goal of initiating actions for the economic valorisation of national biodiversity with the Ministry of Economy, Planning and Development, but doesn't specify what those actions should be.

In the **BVI**, there is a protected areas plan, but it doesn't include aspects geared at developing research related to GR and TK. There is a draft Cultural Policy which includes the goal of bringing more attention to traditional knowledge and its value.

There is a national strategy in **Haiti** for 2012-2021 for improved traditional medicine, to bring the capacity of traditional medicine to become part of the primary healthcare systems. Also there is the goal of using natural resources such as thermal springs and pools and waterfalls in health care. Also moves to capitalise on traditional knowledge as an aspect of Haitian as an attraction.

Report of Group 2 on Valorisation of Genetic Resources and Associated Traditional Knowledge – Opportunities for Caribbean Economies

- **Are you aware of any activities that contribute to income creation based on genetic resources, flora, fauna or traditional knowledge? If so, provide examples.**

Guyana: In indigenous communities traditional knowledge is being used for tourism initiatives. E.g. research being conducted in village to do "fish tourism". People go into these communities to learn about their way of life etc.

Jamaica: Extracts from Majurana for catarah and the Guinea hen weed for cancer and other ailments

Saint Lucia: Herbs being packaged, marketed and sold for their healing power, books being published and sold on the healing powers of these herbs. Herbal stores are increasing in SLU (small business enterprise), Roadside entrepreneurs selling "organic" herbs. Talk shows explaining the use of herbs and local herbal remedies. "Fixtures" being sold in the market place for healing. Whale oil, aphrodisiacs such as turtle "penis in rum"

Suriname: Tropilab Inc. (company in Florida)- Odsany Jewa (Est. Company); University facility of Medicine - doing research; Private sector. Research - National pharmaceutical company together with the University; as well as the local company.

- **Is there a national strategy or do you know of initiatives to support the development of, or further develop research capacities in relation to genetic resources and associated traditional knowledge? Give examples**.

Guyana: Yes, in indigenous communities that is transforming economy in village communities that is moving towards sustainable livelihoods. World wildlife fund has helped them in understanding their biodiversity for information transfer to support sustainable livelihood opportunities

Jamaica: Have a draft biotechnology policy, and draft biosafety policy; Jamaica plant genetic resources for food and agriculture Act.

Saint Lucia: Not aware of a national policy. Have biodiversity bill. Fisheries Department has does historical surveys to gather traditional knowledge on the use of fisheries resources such as sea turtles beyond food security purposes. TRAMIL, UWI, Forestry Department supports research in Terrestrial, Agriculture and Forestry.

Suriname: No national strategy. There have been initiatives but stranded, just started again by the University. Historically, 1993 - 2003 had the ICBG - International Cooperative Biodiversity Group project. Amazon conservation team which does Ethno-cultural work.

- **Are you aware of any activities that contribute to income creation based on genetic resources, flora, fauna or traditional knowledge? If so, provide examples.**

Dominican Republic

There's no use of genetic resource.

- A soft drink called "Mabi" made with a vine and following a technique used by "Tainos".
- An alcoholic drink made with a fruit called "Guavaberry" made by immigrants from Africa called "cocolos".
- Rum flavoured with plant leaves, roots and wood (sometimes with male sexual organs of animals as an aphrodisiac called mamajuana.
- Flat cassava bread made using "taino" techniques called casaba.
- Jewelries/ornaments from plants and animals.

Dominica

- Gum for incense of religious ceremonies.
- Bois Bonde bark for aphrodisiac.
- Various spices put in rum for flavour.
- Herbal teas and the use of medicinal plants by bush doctors.
- Bay-oil from distillation or bay leaf.
- Toloma tarraroot for baby food and starch to iron clothes.

Belize

- The herbal Knowledge that is stolen by Dr. Rosita Arvigo who started a business in processing botanical extracts for medicinal purpose and opening a farm where she has open trails identifying as many plants, species used by the Mayans for medicinal purpose. All of this business is based on mayan traditional knowledge and still nothing is given back to them this is a clear case of biopiracy
- There are also small entrepreneurs who sell local remedies made of vines, bark of trees and seeds.

Haiti

- Leaves sold on markets, the streets and even at the airport usually only Haitians buy them.

Suriname

- Tropilab Inc. owned by Kurt Jessurun. This is an export and wholesaler of medicinal plants, herbs and tropical seed
- Oday-yewa owned by the famous Maroon herbal doctor called Mr. Landveld who is using all kinds of medicinal plants, leafs barks of trees for the use of making all kinds of medicine and creams etc.
- And there are bush doctors (indigenous and maroons) who are making also all kind of remedies from leafs, barks and seeds and selling them on the local markets.
- There is also our famous podisirie drink made from the koemboe (fruits of the koemboe palm).
- And the University of Suriname also does research on medicinal plants and public domain.

- **Is there a national strategy or do you know of initiatives to support the development of, or further develop research capacities in relation to genetic resources and associated traditional knowledge? Give examples**.

Dominican Republic

- As part of a national strategy for development the ministry of higher education, science and technology has been funding research for many years and also has favoured projects on biotechnology, the government has an institute for research and innovation for biotechnology.

Dominica

- They have a National biodiversity Strategy (low carbon and resilience strategy) and action plan, elaborated in 2001 and now being revised.

Belize

- They do not have a National Strategy.

Suriname

- Is now in the process of hearings to come to a National Strategy.

Report of Group 4 on Valorisation of Genetic Resources and Associated Traditional Knowledge – Opportunities for Caribbean Economies

- **Are you aware of any activities that contribute to income creation based on genetic resources, flora, fauna or traditional knowledge? If so, provide examples.**

Yes, we are aware of activities that contribute:

In **Cuba** through different projects and publication we have found the possible use of flora, fauna etc taking into account TK, e.g. for plant we have PPG (product used for cholesterol in the blood) obtained from sugar cane and it is commercially found around the world. It is used to reduce cholesterol in the blood. The tablets come in different doses. PB2 is from the Morinda rojoc and the root is used for revitalisation/vitality for old people and also as an aphrodisiac. Also Vimang is obtained from the bark of mango trees and it is an antioxidant against skin cancer and it can be found in the form of ointment and tea. The drug from the Red Scorpion is used against cancer and it is also an antioxidant. Bioil is a live product used in bacteria that dissolve the oil at the bays (oil spillage etc). Many vaccines are obtained biologically from microorganisms. Obtain products against asthma, cancer from the banana stem. In Cuba some plant species are used to dissolve kidney stones.

Grenada use Nutmeg made from the extraction of essential oils and it is used for aches, pains etc.. Extraction of Noni to be used for blood pressure and diabetes. The use of the raw nutmeg as a muscle relaxer for minor stroke.

In **Dominica** Bay oil is used for making lotions and it is exported t other pharmaceutical for use as a deodoriser and cleaning agent. Noni is also used in Dominica. A lot of herbs are used in teas for medicinal purposes including the bois bande, which is used a additives in rum. Lemon grass and the different grass are used to make teas. This is the same in Grenada. Coconut oil is used for medicinal purposes and culinary in Dominica, Cuba, Grenada and Antigua & Barbuda. The fat from Bora constrictor is used for medicinal purposes as a muscle relaxer and for treatment of warts (Particularly the Caribs). Sea moss is used to make drinks for building bones in kids and as an aphrodisiac.

In **Dominica,** Cassava is processed and exported as a food supplement

Grow and export a species of mushroom (started as a project and has been ongoing for the last 15yrs). This mushroom has medicinal value as it is said to contain antioxidants

- **Is there a national strategy or do you know of initiatives to support the development of, or further develop research capacities in relation to genetic resources and associated traditional knowledge? Give examples**.

There are initiatives by several Indigenous groups and Governments in the Caribbean, e.g. the Caribs try to use genetic resources and TK to continue their cultural traditions. This is done through documentation, video production and storytelling amongst others. In Cuba there is also a general government strategy in place for genetic resources and TK. In Dominica they are trying to do captive breeding of the mountain chicken. The most important strategy in Cuba takes into account the food security and sovereignty. This implies safe employment for people.

Antigua is also looking at the issue of GR and TK through the development of legislation on these issues.

Group Exercise Questionnaire n°2 on Valorisation of Genetic Resources and Associated Traditional Knowledge – Opportunities for Caribbean Economies

- What are the traditional uses of genetic and biological resources in your country?
- Are these uses commercially exploited

OR

In what ways can these uses provide useful leads to the development of commercial products (by small; medium or large enterprise)?

Report of Group 5 on Valorisation of Genetic Resources and Associated Traditional Knowledge – Opportunities for Caribbean Economies

St. Lucia and Jamaica

1) Used for

- Medicinal purpose (e.g.: cerasee for diabetes, stomach cleansing, gripe for kids)
- Food (wild yam, ackee, cassava, fat pork, sweet & soursop)
- Hygiene (chew stick for dental cleaning, soap bush, shampoos)
- Cosmetics (Anatto, aloe vera, log wood)
- Shelter (palms & grasses,) thatching & siding
- Fuel (forest trees, logwood) – multipurpose plants
- Insecticide (Neem, Fevergrass, capsicum, bitterwood)
- Entertainment and beautification (Calabash, bamboo, indigenous species)
- Religion (Ganja, incense, oils)
- For health and wealth (mint, seaweed, ball head bush,) - Multipurpose to utilise maximum space.
- Arts & Craft: Seeds, shells, divers, plant parts – (calabash, job's eye, crab eye,)

2) All categories above have examples of commercial use.

However, there are many GR that have not been fully developed (under-utilised) for commercial use.

Report of Group 6 on Valorisation of Genetic Resources and Associated Traditional Knowledge – Opportunities for Caribbean Economies

- **What are the traditional uses of genetic and biological resources in your country?**
  - Medicinal

- E.g. guinea weed, sour soap, cerasee, flame of the forest, quaco bush, shark oil (most countries)

- Repellent/Pesticide
  - E.g. neem leaf, lemon tree
- Traditional Artefacts
  - E.g. calabash
- Cosmetics
  - E.g. hibiscus, aloe vera, arrowroot, quaco bush (Jamaica), lemon tree, essential oils
- Spiritual Practices
  - E.g. aloe vera (Suriname)

- **Are these uses commercially exploited**

OR

In what ways can these uses provide useful leads to the development of commercial products (by small; medium or large enterprise)?

- Medicinal
  - Can be used to further develop products (e.g. quaco bush to relieve eczema) [large enterprise]
- Repellent/Pesticide
  - Can be used to further develop products [large enterprise]
- Traditional Artefacts
  - Presently being sold [large enterprise]
- Cosmetics
  - Being sold: aloe vera, arrowroot [large enterprise]
- Potential: hibiscus, quaco bush [large enterprise]
- Spiritual Practices
  - Can be exploited [large enterprise]

Report of Group 8 on Valorisation of Genetic Resources and Associated Traditional Knowledge – Opportunities for Caribbean Economies

- **What are the traditional uses of genetic and biological resources in your country?**

Suriname (Commercial Use) = Biological – food (fish, animals, plants, bushmeat), souvenirs (piranha, caymans (crocodilian) – dried), wildlife trade (local & export of birds, snakes, amphibians), timber production (Cedar, soft & hard woods, green heart, purple, brown heart – exported, buildings, firewood, boats etc), medicinal (eg krappa [bitter oil – insecticide, diabetes, easy delivery] natural, exported), coconut (oil, copra, food, souvenirs, mats, brooms), sugarcane (sugar, molasses, alcohol, spiritus [blue-methylated spirits??] -bioethanol), citrus (juice), cassava, pineapple.

Jamaica = Biological – housing (trees, bamboo, wicker, thatch), food (plants, fruits, as above), transport (donkeys, horses, baskets, canoes, eg reeds), souvenirs (coconut shell, calabash, shells, bamboo, wood carvings, paintings, banana paper and cards), pets (parrots), medicinal (infusions, decoctions, tinctures [liquors], root tonics, wines, bark), cleaning agents (animal lard, ackee husk), dyes (turmeric, annatto, indigo bush), entertainment (drums), sugar cane (alcohol), banana, root and tubers, fruits, vegetables

GENETICS: Traditional plant breeding (banana, pumpkin, 3-month sorrel)
Cattle breeding

Suriname: rice (making it resistant against diseases, a shorter harvesting period and much bigger harvest), banana

- **Are these uses commercially exploited?**

Yes, medicinal plants and products (for example, in Suriname 75,000 tons per year being exported)

- **In what ways can these uses provide useful leads to the development of commercial products (by small; medium or large enterprise)?**

  - Small = souvenir shops, cosmetics, teas, drinks, banana paper and cards
  - Medium = processing plants for food supplements, wild-life trade, protected agriculture, aquaculture
    Large = esse

Reflecting on National Strategies

Belize

Possible Approach for the Enhancement of Progress of Nagoya Protocol National Implementation

In view of the fact that in Belize, the Nagoya protocol is nothing that has been aired or advertised in the media,…neither the public at large or the civil service, [*except perhaps, the individual from the government who may have attended previous pro-Nagoya Protocol meetings*] are aware of this instrument. However, it is known by the academia and technical population that Belize is a signatory of the UNITED NATIONS CONVENTION ON BIOLOGICAL DIVERSITY. Therefore it would logically follow that the government is conversant with and ready to entertain and ratify the Nagoya Protocol which emanates from the aforementioned convention. **This remains unknown.** Because of the existing scenario, the most logical approach to advancing the progress of the Nagoya Protocol implementation in Belize is:

1) To conduct an immediate study/investigation concerning the awareness status of the government.
2) Based on the information gathered, decide on the approach, which could evolve into an awareness campaign targeting ALL interested parties.
3) To conduct a genuine consultation program to ensure non-confrontational responses from parties.
4) To encourage/foster dialogue between parties to agree on the concepts of benefit-sharing.
5) All this requires a focal point, a budget, and a time line [calendar of activities].
6) A VISIT FROM THE COMMISSION FOR THE PROTOCOL RATIFICATION TO THE FIRST MEETING WITH THE GOVERNMENT.
7)

British Virgin Islands

British Virgin Islands need to do the following in order to implement ABS:

- Complete a Biodiversity Database (already in progress)
- Complete island profiles (major/minor islands to know what is there on land and in the marine area-already in progress)
- Identify stakeholders
- Update legislation to include ABS
- Create a Research Application Review Board (for reviewing all biological research applications)
- Develop guidelines for biodiversity research (to include reporting mechanism, presentations, companionship of technical persons in the field/monitoring compliance measures)
- Develop contracts for researcher and country, and researcher and private land owners
- Develop TOR
- Create Certificates/ Permits
- Training and Awareness (community/government/international level)
- Look into possible checkpoints
-

Jamaica

Proposed Road Map and Relevant Steps

Cabinet Note: Brief MWLECC on ABS (to include sensitisation, legal framework etc.) ***Timeframe – 2 weeks after receipt of workshop report from ABS workshop facilitators***

Initiation of Policy & legal Framework: The Ministry of Water, Land, Environment and Climate change – arrange meeting to discuss key players, how to, when etc. Process for bio-safety could be replicated. A policy currently exists for bio-technology. Same consultant to prepare both documents (policy and legal framework). A steering committee to be set up – to facilitate the process with NEPA being a compulsory member as they are the focal point for ABS and the Ministry being the focal point for CBD. – ***Timeframe – between February and July 2014***

Steering Committee Members should be comprised of the following:

- National Focal Points (ABS & CBD)
- GEF Small Grants Programme
- Jamaica Intellectual Property
- Bio-Tech Centre/Natural Products Institute (UWI)
- Natural Products Research Lab (UTech)
- College of Natural & Applied Sciences (NCU)
- Scientific Research Council
- Forestry Department
- Ministry of Finance and Planning (Customs Department)
- Ministry of Agriculture and Fisheries
- Ministry of Education and Culture
- Social Development Commission
- JAMPRO
- CSOs (Cockpit Country, Blue and John Crow Mountains, Local Forest Management Committee
- Private Sector (Jamaica Tourist Board)

Establish Communication/Public Awareness Plan: national public awareness needs to be conducted and a glossary of terms needs to be developed especially if local communities are to be involved in the process. Format/methods of communication: media (print, electronic etc.), community meetings, stakeholder workshops. Preparation of flyers etc. to be incorporated in national and local project initiatives especially Protected Areas Systems Project being implemented by NEPA and funded by the Global Environment Facility (GEF). ***Timeframe – October 2014***

Resource Mobilisation: – to fund the above activities and capacity building workshops for local CSOs and other key stakeholders – ***Timeframe – ongoing - once activities have started.***

The implementation of the above steps should get the country on the path to ratification.

Suriname

Country approach (Follow up of the ABS workshop held in Jamaica, Kingston 25 –29 November, 2013)

- Follow up on the status quo of ABS report November 2013
- Communication strategic plan (public sector, private sector, ILC's, University, NGO's, CBO's)
- Adapt/ Establish applicable national legislation
- Process to ratify NP
-

Contact

For questions and comments on the workshop please contact the organisers

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